

Weston Services, Inc.

Raritan Plaza I 4th Floor, Raritan Center Edison, New Jersey 08837 (201) 225-3990

19 August 1991

Edgar Kaup, P.E.
Case Manager
Bureau of Federal Case Management
Division of Hazardous Waste Managers
CN 026
Trenton, NJ 08625-0028

RE: L.E. CARPENTER SITE; COMMENTS DATED 5 AUGUST 1990 REGARDING FINAL BASELINE RISK ASSESSMENT

Dear Mr. Kaup:

On behalf of our client, L.E. Carpenter and Co., Weston Services is responding to your comments of August 5, 1991 regarding the final Baseline Risk Assessment dated May 1991. These comments are consistent with the teleconference conducted on 15 August 1991 with the following individuals in attendance:

Edgar Kaup, Case Manager, NJDEP
Bill Lowry, NJDEP-BEERA
Taku Fuji, NJDEP-BEERA
Mark Madalino, USEPA-Region II
Larry Dzuik, ESI (formerly WESTON)
Bob Warwick, WESTON
Eva Timmer, WESTON
Tod Delong, WESTON
Jack Weidner, WESTON
Martin O'Neill, WESTON

Our responses are organized to correspond to the order of NJDEP comments:

General Comment:

Enclosed you will find a copy of the tables detailing sediment sampling results which correspond to Figure 1-2. These tables will be incorporated into the revised Final RA.



Mr. Kaup NJDEP

- 2 -

19 August 1991

Specific Comments:

1. WESTON will continue to evaluate concentrations of inorganics in soils using average concentrations on site vs. background. A table will be presented which will identify all locations on-site which exceed average background concentrations. This will allow identification of "hot spots" where individual inorganics have exceeded background. Contaminants which are present above background at a frequency of less than 5% will be eliminated from further consideration per CERCLA guidance.

The uncertainty analysis will be revised to evaluate the issue of on-site vs. off-site or possible non-manufacturing origin of contaminants.

- 2. The reference to deed restrictions in the future use scenario discussion (pg. 3-7) will be eliminated. Consistent with our discussion, the deed restriction and references to future residential use of the site will be discussed in the uncertainty analysis.
- 3. The derivation of the showering scenario equivalent utilized in the final RA will be presented and further explained in the revised final RA.
- 4. WESTON utilized a guidance consistent with USEPA Region 1 and 8. Further discussion of the overestimation of risks for volatiles, and negligible underestimation of inorganic risks will be discussed in the uncertainty analysis.
 - WESTON is also evaluating the potential impact of the VOC absorption rate on cleanup goals.
- 5. WESTON utilized an increased frequency of exposure but decreased exposure duration given that the possibility of actually swimming in the Rockaway River adjacent to and immediately downgradient to the site is extremely limited since the river is less than two feet deep. The discussion of the assumptions used in the river exposure scenario will be expanded on.
- 6. The latest guidance provided by USEPA-OSWER suggests the use of 54 gm/day consumption rate. WESTON employed 54 gm/day in the risk calculations.
- 7. WESTON appreciates the role of ECAO and all future assumptions or variation of standard extrapolations will be discussed prior to use.



Mr. Kaup NJDEP

- 3 -

19 August 1991

- 8. Guidance provided by NJDEP suggested that we use soil concentrations from the top 8 feet for surface soil. WESTON will evaluate the potential for overestimation or underestimation of risks using soils at eight feet. That evaluation/discussion will be included in the uncertainty analysis.
- 9. WESTON will include a discussion in the uncertainty analysis of potential overestimation of risks that result from assuming additivity of hazard quotients by pathway/chemical regardless of mechanism of action.
- 10. WESTON is currently attempting to resolve this issue with NJDEP-BEERA and NJDEP-BGWPA. Once resolved, the appropriate revision will be made to the document relating to the ditch.
- 11. The text will be modified as requested.
- 12. The text will be modified as suggested.
- 13. The text will be modified in order to evaluate "background" samples collected in relation to the USGS data/paper. The additional text will present a discussion to substantiate the selection of background concentrations.
- 14. Text will be expanded to more accurately depict sediment sample results and trends found.
- 15. Tables 6-3 and 6-4 will be revised as requested in order to more accurately identify areas of greatest environmental concern.
- 16. The feasibility study is currently being revised to evaluate remediation of river sediments.
- 17. The revised table as discussed in the "general comments" will clear up any confusion regarding river sediment sampling locations.

Other Comments

- Page 1-5 The direction reference to Air Products will be changed.
- Page 2-9 Table 2-1 will be corrected.



Mr. Kaup NJDEP

- 4 -

19 August 1991

These responses are consistent with our discussion of 15 August 1991, and therefore, we anticipate no further comments. If the Department or Agency have any objections to any response, please let us know by 23 August 1991. If WESTON received no responses by August 23, we will proceed with the required revisions and deliver the revised Final Risk Assessment by 6 September 1991.

Very truly yours,

ROY F. WESTON, INC.

David Henderson Project Manager

cc: Bill Lowry
Taku Fuji
Mark Madalino
Larry Dzuik
Bob Warwick
Eva Timmer
Tod Delong
Jack Weidner

Martin O'Neill

Cris Andersen, M.A. Hanna

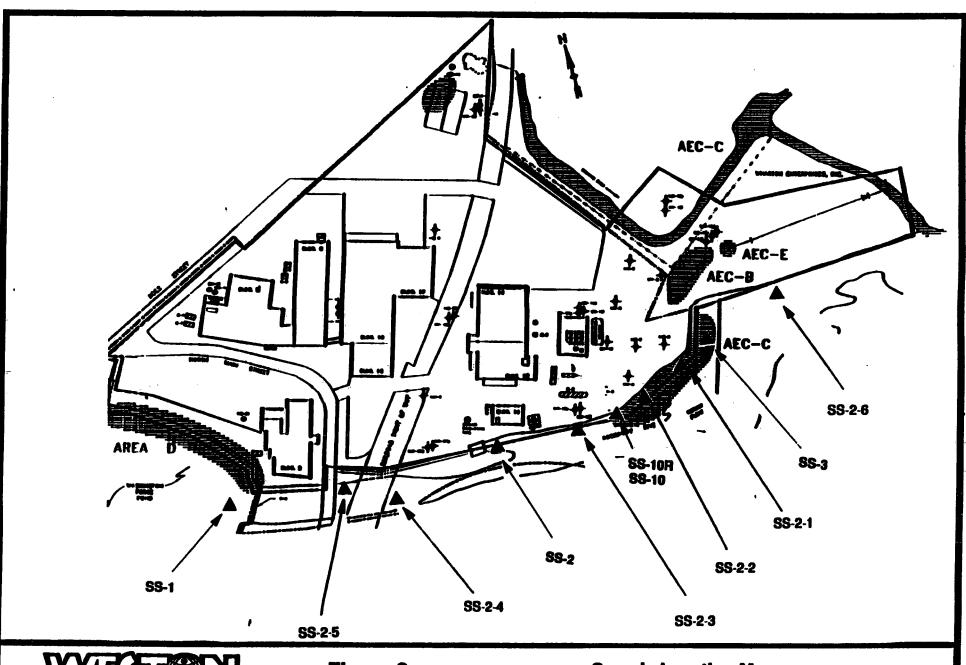




Figure 2

- Indicates Sample Location

Sample Location Map

L.E. Carpenter

Map is Not To Scale

TABLE 1 INORGANIC SAMPLE RESULTS

(Concentrations in mg/kg)

		T									
Metal	SS-2-1	SS-2-2	SS-2-3	SS-2-4	SS-2-5	SS-2-6	SS-10	SS-1	SS-2	SS-3	FB
Collection Date	April 1991	April 1991	April 1991	April 1991	April 1991	April 1991	August 1990	March 1989	March 1989	March 1989	April 1991
. Depth	2.0-2.5 ft.	1.5-2.0 ft	1.5-2.0 ft.	0-6 inches	0-6 Inches	2.0 ft.	0-6 inches	0-6 Inches	0-6 inches	0-6 inches	
Antimony	0.5	1.0	430	8.5	12	19	718	ND	ND	64.3	ND
Copper	310	12	230	17	17	35	711	30.4	87.5	36.3	ND
Lead ·	150	41	270	40	66	130	339	65.4	655	199	ND
Mercury	0.10	0.10	0.51	0.16	0.10	0.29	0.09	ND	2.5	0.5	ND

TABLE 2 SAMPLE RESULTS FOR BASE NEUTRAL COMPOUNDS (Concentrations in ug/kg)

COMPOUND	SS-2-1	SS-2-2	SS-2-3	SS-2-4	SS-2-5
1					
Date Collected	April 1991	April 1991	April 1991	April 1991	April 1991
Depth	2.0-2.5 ft.	1.5-2.0 ft.	1.5-2.0 ft.	0-6 inches	0-6 inches
Acenaphthene	ND	ND	ND	ND	250
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene '	ND	ND	750	ND	580
Benzo(a)Anthracene	ND	ND	1,600	ND	1,600
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
Benzo(a)Pyrene	ND	ND	1,300	ND	1,300
Benzo(b)Fluorranthene	ND ND	ND	1,200	ND	1,200
Benzo(k)Fluoranthene	ND	ND	1,200	ND	1,000
Bis(2-Ethylhexyl)Phthalate	ND	ND	25,000	ND	3,300
Butyl benzyl pthalate	ND	ND	ND	ND	ND
Chrysene	ND	ND	1,700	ND	1,700
Dibenzofuran	ND	ND	ND	ND	86
Di-n-butyl pthalate	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND
Di-n-Octyl Phthalate	ND	ND	ND	ND '	ND
Fluoranthene	ND	ND	2,900	500	3,100
Fluorene	ND	ND	ND	ND	ND
ldeno(1,2,3-c,d)Pyrene	ND	ND	ND	ND	470
2-Methylnaphthalene	ND	ND	ND	NĐ	ND
Naphthalene	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	2,900	430	2,500
Pyrene	ND	ND	3,300	610	3,000
Total Base Neutral Compounds	ND	ND	41,850	1,540	20,086

TABLE 2 (Cont.) SAMPLE RESULTS FOR BASE NEUTRAL COMPOUNDS

(Concentrations in ug/kg)

COMPOUND	SS-2-6	SS-10R	SS-1	SS-2	SS-3	FB
Date Collected	April 1991	April 1991	March 1989	March 1989	March 1989	April 1991
Depth	2.0 ft.	1.5-2.0 ft.	0-6 inches	0-6 inches	0-6 inches	
Acenaphthene	310	ND	ND	430	1,300	ND
Acenaphthylene	ND	ND	ND	490	ND	· ND
Anthracene	1,200	ND	140	1,200	2,600	ND
Benzo(a)Anthracene	5,400	ND	380	3,100	6,400	ND
Benzo(g,h,i)perylene	ND	ND	ND	1,700	3,300	ND
Benzo(a)Pyrene	5,000	ND	300	2,900	4,700	ND
Benzo(b)Fluorranthene	3,300	ND	540	6,400	8,200	ND
Benzo(k)Fluoranthene	4,500	ND	540	6,400	8,200	ND
Bis(2-Ethylhexyl)Phthalate	76,000	1,600	1,100	55,000	54,000	ND
Butyl benzyl pthalate	ND	ND	ND	920	ND	ND
Chrysene	5,600	ND	560	4,300	6,500	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
Di-n-butyl pthalate	ND	ND	680	ND	2,300	ND
Dibenzo(a,h)anthracene	ND	ND	ND	430	1,400	ND
Di-n-Octyl Phthalate	840	ND	ND	ND	ND	ND
Fluoranthene	8,100	ND	800	5,200	14,000	ND
Fluorene	600	ND	ND	610	1,300	ND
Ideno(1,2,3-c,d)Pyrene	2,300	ND	ND	1,500	2,500	ND
2-Methylnaphthalene	200	ND	ND	ND	ND	ND
Naphthalene	ND	ND	200	310	690	ND
Phenanthrene	7,000	ND	600	4,900	10,000	ND
Pyrene	13,000	ND	700	6,100	11,000	ND
Total Base Neutral Compounds	133,350	1,600	6,000	95,490	130,190	

TABLE 3
SAMPLE RESULTS FOR TOTAL ORGANIC CARBON

Test Descriptions	SS-2-1	SS-2-2	SS-2-3	SS-2-4	SS-2-5	SS-2-6	FB
Solids, Total Percent	77	76	67	54	64	47	
Total Organic Carbon (percent)	5.1	5.1	8.6	5.2	4.0	11	<1.0

FB = Denotes Field Blank

TOCLE